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FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL.			SHELEHEDA, JAMES R		
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	<b>-,</b>		2617		

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Please find below and/or attached an Office communication concerning this application or proceeding.

· - · · · <u>- · · -</u>		Apr	olication No.	Applicant(s)	<u>-</u>		
		09/700,610 NISHIO ET AL.  Examiner Art Unit					
Office Action Summary		Exa	miner	Art Unit			
		Jam	nes Sheleheda	2617			
Period fo	The MAILING DATE of this commun or Reply	ication appears	on the cover sheet w	ith the correspondence a	ddress		
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MINISTRICT IN THE MINISTRICT	AILING DATE ( of 37 CFR 1.136(a). Intunication. atutory period will appl will, by statute, cause	OF THIS COMMUNI In no event, however, may a lift y and will expire SIX (6) MON the application to become Al	CATION. reply be timely filed  VTHS from the mailing date of this of BANDONED (35 U.S.C. § 133).	·		
Status							
1)⊠	Responsive to communication(s) file	ed on 23 August	± 2005.				
·	•	2b)⊠ This actio					
3)	Since this application is in condition	for allowance e	xcept for formal mat	ters, prosecution as to th	e merits is		
,	closed in accordance with the practi	ce under <i>Ex pai</i>	rte Quayle, 1935 C.E	D. 11, 453 O.G. 213.			
Dispositi	on of Claims						
4)🖂	Claim(s) 1-24 is/are pending in the a	pplication.					
	4a) Of the above claim(s) is/a	re withdrawn fro	om consideration.				
5) 🗌	Claim(s) is/are allowed.						
6)⊠	Claim(s) 1-24 is/are rejected.						
	Claim(s) is/are objected to.						
8) 🗌	Claim(s) are subject to restrict	ction and/or elec	ction requirement.				
Applicati	on Papers						
9)	The specification is objected to by th	e Examiner.		,			
10)	The drawing(s) filed on is/are:	a) accepted	or b) objected to	by the Examiner.			
•	Applicant may not request that any object						
_	Replacement drawing sheet(s) including						
11)	The oath or declaration is objected to	by the Examin	er. Note the attache	d Office Action or form P	TO-152.		
Priority (	ınder 35 U.S.C. § 119						
,	Acknowledgment is made of a claim ☐ All b) ☐ Some * c) ☐ None of:	for foreign prior	rity under 35 U.S.C.	§ 119(a)-(d) or (f).			
,	1.☐ Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	$3.\square$ Copies of the certified copies	of the priority de	ocuments have been	received in this Nationa	l Stage		
	application from the Internation	nal Bureau (PC	T Rule 17.2(a)).				
* 5	See the attached detailed Office actio	n for a list of the	e certified copies not	received.			
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	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F	PTO-948)		Summary (PTO-413) s)/Mail Date			
3) 🔲 Infor	mation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date			nformal Patent Application (PT	O-152)		

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/23/05 has been entered.

#### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Maissel et al. (Maissel) (WO 99/01984) (of record).

As to claim 1, Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27), comprising:

meta information storing means for storing meta information about data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

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identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content data according to the content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule defined by the data structure of meta information about the content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

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As to claim 2, Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340), comprising:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content data according to the content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31 and page 21, lines 1-5);

transmitting means for transmitting the meta information, the meta information schema, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17).

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the structure of the meta information schema that has been stored said meta information schema storing means and the meta information that has been stored in said meta information storing means corresponding to content data that has been received through said communication controlling means (preparing

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customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 3, Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27), comprising:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content data according to the content that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

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inference rule storing means for storing an inference rule defined by the data structure of meta information about data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17);

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the inference rule (user profile containing inference rules; page 27, lines 28-31 and page 28, lines 1-9) that has been stored in said inference rule storing means (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) corresponding to content data that has been received through said communication controlling means (television viewing information received through an upstream modem; page 28, lines 25-31);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data

corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 4, Maissel discloses converting means for converting the format of the meta information into a transmission format (wherein the guide information must be formatted for transmission over the television broadcast channels; see Maissel at page 16, lines 12-17).

As to claims 5 and 23, Maissel discloses wherein content data that has been received through said communication controlling apparatus is data that represents a use history of meta information of the receiving apparatus (a user's television viewing history; see Maissel at page 28, lines 25-30).

As to claim 6, Maissel discloses a receiving apparatus for receiving data for providing digital content, comprising:

receiving means (Fig. 2; receiving unit, 120) for receiving at least meta information and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29);

wherein the receiving means receives identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

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meta information schema storing means for storing a meta information schema (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

profile operating means (Fig. 2; Intelligent agent, 130) for operating selection criterion for selecting meta information corresponding to the meta information schema (performing the EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule defined by the data structure of meta information (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31 and page 28, lines 1-11);

data storing means for receiving and storing data of contents represented by the meta information that has been selected (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

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a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 7, Maissel discloses a receiving apparatus for receiving data for providing digital content data (110), comprising:

receiving means (Fig. 2; receiving unit, 120) for receiving at least meta information and the content data through a transmission path (television programs and program schedule information; page 17, lines 24-29) and receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

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profile operating means (Fig. 2; Intelligent agent, 130) for operating selection criterion for selecting meta information corresponding to the meta information schema (performing the EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule about the data structure of meta information (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31 and page 28, lines 1-11);

changing means for changing the structure of the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information storing means (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to the user profile that has been stored in said user profile storing means (page 19, lines 1-8 and page 20, lines 19-27) and to the inference

rule that has been stored in said inference rule storing means (page 27, lines 28-31 and page 28, lines 1-11);

data storing means for receiving and storing data of contents represented by the meta information that has been selected (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 8, Maissel discloses wherein said changing means changes the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information storing means corresponding to a use history of meta information of a user (a user's viewing history; see Maissel at page 28, lines 25-30).

As to claim 9, Maissel discloses wherein said changing means changes the meta information schema corresponding to a user's setup (see Maissel at page 19, lines 9-18) and stores the changed meta information schema and changed meta information to said meta information schema storing means (user profile indicating how to modify the EPG; see Maissel at page 19, lines 9-18) and said meta information storing means (the customized EPG; see Maissel at page 20, lines 19-page 22, lines 17), respectively.

As to claim 10, Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about content data according to the content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule defined by the ata structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

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transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule, identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means the received meta information schema (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

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meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

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As to claim 11, Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8A, headend, 340; page 28, lines 12-24) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8A, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about content data according to the content data that is transmitted (the default EPG data before customization for a user site; page 20, lines 19-31, page 21, lines 1-5 and page 29, lines 1-9);

transmitting means for transmitting the meta information, the meta information schema, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17);

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the structure the meta information schema that has been stored in said meta information storing means and the meta information that has been stored in said meta information storing means corresponding to content data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9), and

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where the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing meta information schema that has been received (wherein the customized EPG data and format must be stored upon receipt; page 24, lines 27-31, page 25, lines 1-3 and page 29, lines 1-9);

profile operating means for operating a selection criterion for selecting meta information corresponding to the meta information schema (wherein viewer information is selectively stored and transmitted for later EPG customization; page 17-31);

user profile storing means (page 28, lines 17-31) for storing a user profile generated by said profile operating means (wherein the profile data must be stored before transmission to the headend; page 28, lines 17-31);

meta information filtering means for selecting and receiving meta information corresponding to the user profile (receiving the EPG customized based upon a user profile; page 20, lines 19-31, page 22, lines 1-17 and page 29, lines 1-9);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

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meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3); and

communication controlling means for transmitting data to the transmitting apparatus (page 28, lines 25-31);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 12, Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

(page 28, lines 25-30); and

meta information storing means for storing meta information about content data according to the content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule about the data structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and communication controlling means for communicating with a receiving apparatus

changing means for changing the inference rule (user profile containing inference rules; page 27, lines 28-31 and page 28, lines 1-9) that has been stored in said inference rule storing means (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) corresponding to content data that has been received through said communication controlling means

(television viewing information received through an upstream modem; page 28, lines 25-31); and

wherein the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule, identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and contents data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing the meta information schema that has been received (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, lines 1-17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, line 17);

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meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22);

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3); and

communication controlling means for transmitting data to the transmitting apparatus (page 28, lines 25-31);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data

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corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 13, Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data according to the content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule about the data structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and

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wherein the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule, identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing the meta information schema that has been received (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, line 17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

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meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

changing means for changing the structure of the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information storing means (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to the user profile that has been stored in said user profile storing means (page 19, lines 1-8 and page 20, lines 19-27) and to the inference rule that has been stored in said inference rule storing means (page 27, lines 28-31 nad page 28, lines 1-11);

data storing means for receiving and storing data of contents that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 14, Maissel discloses a transmitting method for providing digital content, comprising the steps of:

when meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17),

a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data are transmitted through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the structure the meta information schema and the meta information corresponding to data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9) and transmitting the changed data (page 29, lines 4-13);

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wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 15, Maissel discloses a transmitting method for providing digital content, comprising the steps of:

when meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), and

content data are transmitted through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17) including identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

changing the inference rule corresponding to content data that has been received from a receiving apparatus (wherein the profile, and the contained rules, are updated

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with viewing information; page 28, lines 25-31 and page 29, lines 1-9) and transmitting the changed data (page 29, lines 4-13);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claims 16 and 24, Maissel discloses receiving a meta information use history from the receiving apparatus (see Maissel at page 28, lines 25-31) and transmitting a meta information schema, meta information and an inference rule that have been changed so that they have respective data structures corresponding to the meta information use history (transmitting the customized EPG; see Maissel at page 29, lines 1-9).

As to claim 17, Maissel discloses a receiving method for receiving data for providing digital content, comprising the steps of:

storing a meta information schema that defines the data structure of meta information (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

searching and/or browsing the meta information (page 31, lines 11-13); and changing the structure of the meta information schema and meta information that has been stored (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to a user profile (page 19, lines 1-8 and page 20, lines 19-27) and to an inference rule (page 27, lines 28-31 and page 28, lines 1-11);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 18, Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the structure of the meta information schema that is transmitted corresponding to content data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9);

storing a meta information schema that defines the data structure of the meta information that has been received on a receiving side (wherein the customized EPG must be stored before output; page 24, lines 12-18);

storing the meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and

searching and/or browsing the meta information (page 31, lines 11-13);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

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wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 19, Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), an inference rule (page 28, lines 1-9 and page 30, lines 20-27), identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the inference rule that is transmitted (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) corresponding to data that has been received from a receiving apparatus (television viewing information received through an upstream modem; page 28, lines 25-31);

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storing a meta information schema that defines the data structure of meta information that has been received on a receiving side (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and searching and/or browsing the meta information (page 31, lines 11-13);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

As to claim 20, Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), an inference rule (page 28, lines 1-9 and page 30, lines 20-27), identifier data associated with a particular portion of the content data that is adapted to

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distinguish a segment of content data (program titles identifying program content; Fig. 9A, page 16, line 24-page 17, line 16 and page 31, lines 7-13) and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

storing a meta information schema that defines the data structure of meta information that has been received on a receiving side (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and

changing the structure of the meta information schema and meta information that has been stored (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to a user profile (page 19, lines 1-8 and page 20, lines 19-27) and to an inference rule (page 27, lines 28-31 and page 28, lines 1-11);

wherein the meta information schema includes the identifier data (Fig. 9A; page 16, line 24-page 17, line 16 and page 31, lines 7-13) and attribute names of the content (actor and director names; page 16, line 24-page 17, line 16);

wherein the meta information includes the identifier data (page 16, line 24-page 17, line 16), the attribute names (page 16, line 24-page 17, line 16) and description data corresponding to each attribute name of the content (program descriptions; page 16, line 24-page 17, line 16).

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As to claims 21 and 22, Maissel discloses converting means for converting the format of the meta information into a transmission format (wherein the guide information must be formatted for transmission over the television broadcast channels; see Maissel at page 16, lines 12-17).

### Response to Arguments

4. Applicant's arguments filed 08/23/05 have been fully considered but they are not persuasive.

In response to applicant's arguments on page 24, that Maissel and Aras fail to disclose the meta information schema and meta information, as recited in the claims.

In response, applicant is directed to the new rejections above wherein it is noted that Maissel in fact discloses all of the new claim limitations, as program identifiers (program titles), attribute names (names of directors and actors associated with the program) and descriptions (program descriptions) are all part of Maissel's program guide system (see pages 16 and 17).

#### Conclusion

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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# **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commission P.O. Box 145 Alexandria, \			
on (Date)	_ <del>.</del>		
••	ed name of person signing this certificate		
Registration	lumber:		-
Certificat	of Transmission		
I hereby cert Trademark 0 (Date)	y that this correspondence is being facsing facsing face, Fax No. ( ) on	nile transmitted 	to the United States Pate
	ted name of person signing this certificate		
<del> </del>			
Registration	Number:		
	er to 37 CFR 1.6(d) and 1.8(a)(2) ssions and mailing, respectively.	for filing limi	tations concerning

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda Patent Examiner Art Unit 2617

JS

VIVEK SRIVASTAVA PRIMARY EXAMINER

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